

## **ABSTRACT OF THE DISCLOSURE**

In a magnetic resonance imaging apparatus, a transmitting/receiving coil is attached to a patient at a region of interest and disposed within a static magnetic field, a radio-frequency magnetic field, and a gradient magnetic field and an image of the patient is obtained. A tabletop is used to move the patient in the static field in a horizontal direction within a horizontal plane and up and down in a direction that is perpendicular to the horizontal plane, a patient couch controller causing the tabletop to move, based on the position of the region of interest obtained from the image so that the position of the region of interest is caused to coincide in three dimensions with the center of the static magnetic field and/or the gradient magnetic field.

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In a magnetic resonance imaging apparatus, a transmitting/receiving (T/R) coil (19) is attached at a region of interest of a patient (P) disposed within a static magnetic field, a radio-frequency magnetic field, and a gradient magnetic field being applied to the patient and the T/R coil receiving a magnetic resonance signal from the patient, so as to obtain an image of the patient. A tabletop (6) can be used to move the patient (P) in the static field in a horizontal direction within a horizontal plane and up and down in a direction that is perpendicular to the horizontal plane, a patient couch controller (16) causing a tabletop (6) to move, based on the position of the region of interest obtained from an image of the patient (P), so that the position of the region of interest is caused to coincide with the center (O) of the static magnetic field and the gradient magnetic field.